

Water Supply and Reservoirs

Candice Hasenyager





PLAN | CONSERVE | DEVELOP | PROTECT Utah's Water Resources

Importance of Reservoirs

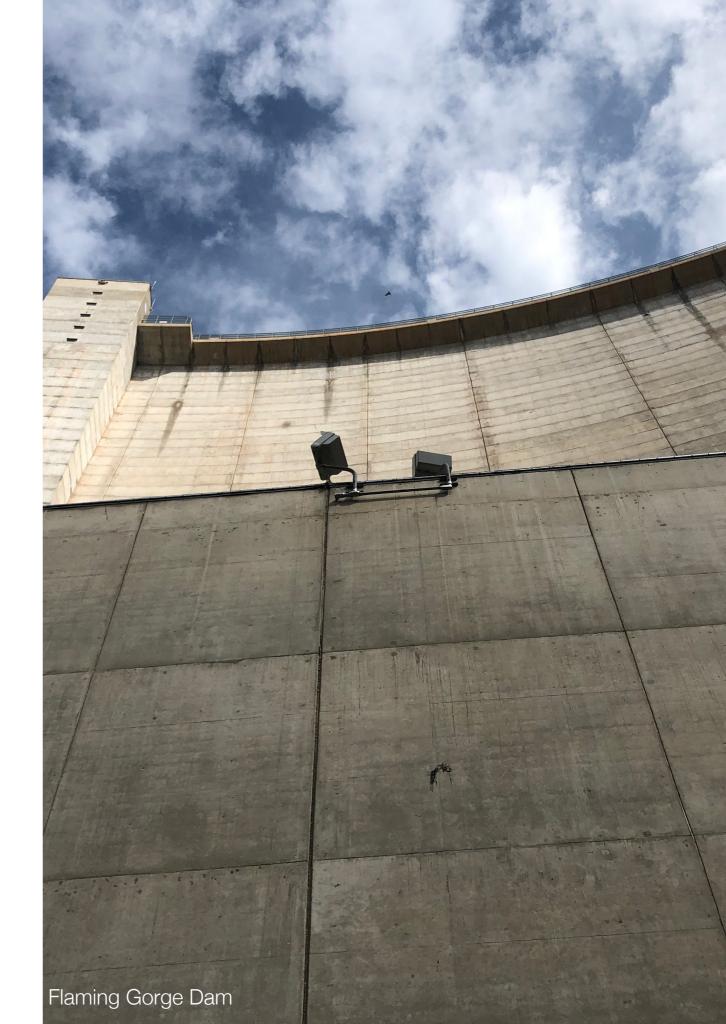
95% of our water supply comes from snow

Reservoirs capture and store spring runoff

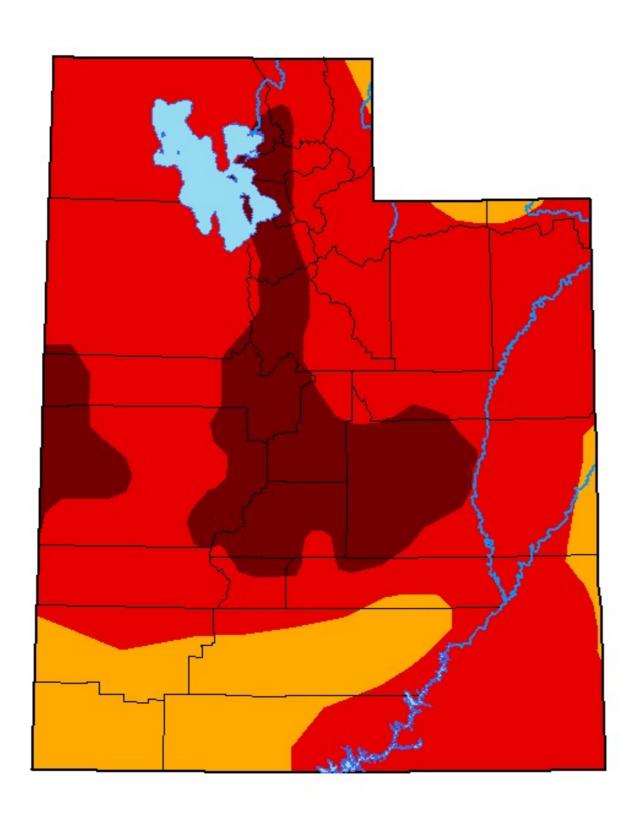
Dams form reservoirs

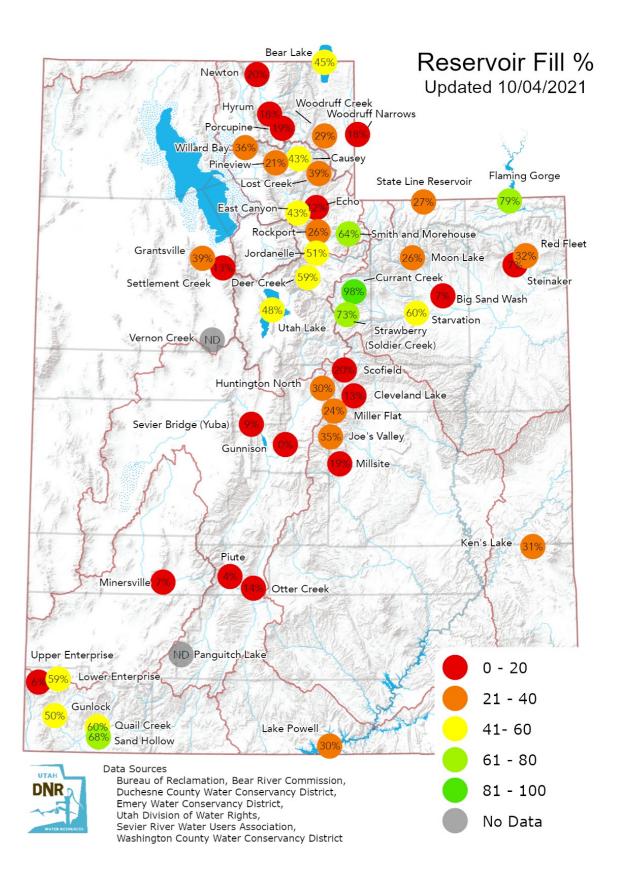
Small reservoirs store about one year of water

Larger reservoirs can store several years of water supply



U.S. Drought Monitor Utah





Planning and Design Considerations for Dams

- Suitable site
- Water supply and water right
- Water demand study
- Environmental impact
- Cost



Bear River Development Act

Utah Legislature 1991

"The Division (Utah Division of Water Resources) shall develop the surface waters (220,000 acrefeet) of the Bear River and its tributaries through the planning and construction of <u>reservoirs</u> and <u>associated facilities</u> as authorized and funded by the Legislature; own and operate the facilities constructed; and market the developed waters"



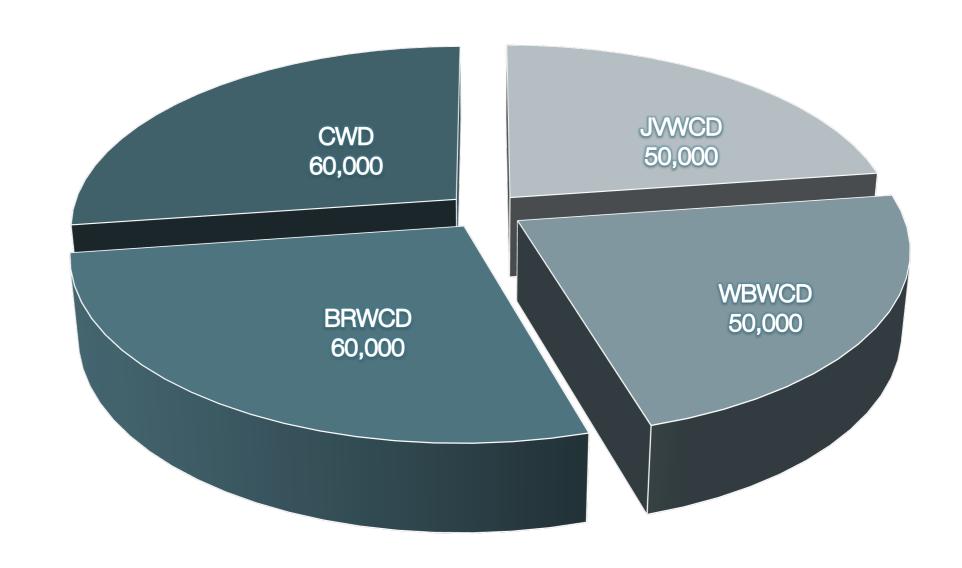
Bear River Development Act Allocation

Bear River Water Conservancy District (BRWCD)

Cache Water District (CWD)

Jordan Valley Water Conservancy District (JVWCD)

Weber Basin WCD (WBWCD)





2019 Feasibility Bear River Development Report

- Conceptual BRD system 13 scenarios
 - How would pipelines, reservoirs, pumps work together
- Potential reservoir sites 6 narrowed from 46
- Updated hydrology, preliminary climate change modeling, Great Salt Lake impacts
- Updated cost estimate
- Right of way corridor for large diameter pipeline



Whites Valley

- West hills north west of Tremonton, Utah
- Off-channel storage reservoir and would be primarily a pumpedstorage facility
- 12 of 13 scenarios included Whites Valley site
- Various sizes ranging from 170,000 – 610,000 acre-ft



Timeline

